and costs (all p<0.05), the adjusted annual incremental costs in abusers versus non-abusers were €8,999 (95% Confidence Interval [CI]: €8,455-€9,511) and €15,523 (95% CI: €15,389-€15,657) per patient among Medicaid and commercially insured patients, respectively, during the post-index period. The main cost driver was inpatient hospitalization which comprised 88% of unadjusted incremental costs during follow-up. Costs in Medicaid insured and 63% in commercially insured patients.

CONCLUSIONS: Diagnosed opioid abusers among long-term IR hydrocodone users impose significantly higher financial burden in both Medicaid and commercial payers. The adjusted annual incremental costs of all-cause direct health care expenditures, ranging from €24,882 to €15,523 per abuser per year.

PSY38 PREVALENCE-BASED MEASUREMENT OF THE ECONOMIC BURDEN OF RARE DISEASES: CASE STUDY TO DETERMINE THE ANNUAL COST OF ACROMEGALY IN ITALY


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OBJECTIVES: Although acromegaly is acknowledged as requiring resource-intensive treatment of its ultimate economic burden is unclear. As an extension of work presented at ISPOR 2013 International Conference (New Orleans, US), the objective of this research is to measure the annual economic burden of acromegaly in Italy using a case-review methodology with a prevalence-based sample of patients diagnosed with acromegaly. A case-review methodology was used whereby endocrinologists reviewing 86 patient cases (4 cases per physician) diagnosed with acromegaly. The patient case histories included: resource utilization including office visits, inpatient stays, diagnostic procedures, laboratory exams, medical procedures performed, and an estimate of lost productivity. A micro-costing approach was used to obtain costs in the prior 12 months for each patient case reviewed. Patients were sorted into high, medium and low resource users. Direct medical costs and indirect costs represent the main components of the economic burden to patients. The objective of this study is to estimate the average annual direct and indirect costs associated with the management of acromegaly in Italy.

RESULTS: A longitudinal multicenter study was conducted by enrollment of 22 physicians of endocrinologists reviewing 86 patient cases (4 cases per physician) diagnosed with acromegaly. The patient case histories included: resource utilization including office visits, inpatient stays, diagnostic procedures, laboratory exams, medical procedures performed, and an estimate of lost productivity. A micro-costing approach was used to obtain costs in the prior 12 months for each patient case reviewed. Patients were sorted into high, medium and low resource users. Direct medical costs and indirect costs represent the main components of the economic burden to patients. The objective of this study is to estimate the average annual direct and indirect costs associated with the management of acromegaly in Italy.

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OBJECTIVES: To estimate the social cost of bariatric surgery techniques in obese patients with hypertension, diabetes mellitus (T2DM) and anxiety-depression disorders (ADD) in Italy. METHODS: A longitudinal multicenter study was conducted by enrollment of obese adult patients in charge to 6 Hospital in Italy at the intervention of gastric banding, gastric-by-pass, and sleeve gastrectomy and following up to 1 year.

Direct medical costs were estimated using tariffs for laboratory tests, diagnostic exams, procedures and surgery. Procedures and surgery were costed at Center level. Non medical costs included costs for travel and accommodation, domestic help and informal care. The loss of productivity of patients have been estimated using the human capital approach. The incremental effects of having continuous education on social capital were estimated by multivariate Generalized Linear Models (log link, Gamma family) adjusting for gender, age, BMI, type of intervention and complications. Costs are expressed in Euro 2013.

RESULTS: Among 301 patients, 125 had hypertension, 53 (18%) T2DM/day and (36%) ADD. The raw cost social intervention of weight loss surgery was €8,749 (± 2,359), 9,511 (± 2,292) and 8,999 (± 2,275) for patients with hypertension, T2DM and ADD. A significant incremental effect of having T2DM was found on social cost of intervention (7,51; 95%CI: 2,462, 0,004). After all intervention reductions of 48%, 81% and 3% for ADD. Direct non medical costs and indirect costs represent the main component of social cost in patients with hypertension and ADD. CONCLUSIONS: Bariatric surgery led to reductions of obesity-related comorbidities. One year after, the economic burden is mainly sustained by patients, their families and the productivity system.

PSY41 COST OF ILLNESS ANALYSIS OF DUCHENNE MUSCULAR DYSTROPHY IN ITALY

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OBJECTIVES: The objective of this study is to estimate the average annual direct and indirect costs of the management of Duchenne muscular dystrophy (DMD) in Italy considering both National Health System (NHS) societal perspective. METHODS: A probabilitic prevalence-based cost of illness model was used to estimate the economic impact of DMD. All the costs were determined through a survey that families registered with the Muscular Dystrophy Association "Parent Project onlus" completed on-line. NHS and family prospective has been analyzed during 1 year. RESULTS: Direct medical costs were estimated using loss of productivity due to absenteeism, while the bottom up approach was used to calculate direct costs. Furthermore, a probabilistic sensitivity analysis with 5,000 Monte Carlo simulations was performed, in order to test the robustness of results and define the 95% Confidence Intervals. RESULTS: The indirect costs were those that weigh more on the total expenditure of the NHS for DMD; the direct cost was €475.596 (95%CI: €5,124,369,72 - €10,263,785) and nonmedical costs are €12,944,879 (95% CI: €7,925,699 - €19,175,331). Patients with more than 16 years spend more than those between 0 and 7 years old, and even more than those between 8 and 15.

For what concern the private expenditure, the model estimated a total of 2,910,506 (95%CI: €5,184,785 - €14,982,297). The population of patients is estimated to be 7,282 (±273,446,219) for the nonmedical costs. CONCLUSIONS: DMD is a rare disease, its economic impact on NHS is quite remarkable. Furthermore, the most of the impact relies on families and society.

PSY42 THE BURDEN OF MYELOFIBROSIS IN GREECE

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OBJECTIVES: To estimate the burden of myelofibrosis (MF) in Greece, focusing on epidemiological data, quality of life (Qol), direct and indirect costs. METHODS: A 17-page questionnaire was developed, validated, and completed with the Delphi technique. It included questions on epidemiological, resource use, Qol and socioeconomic data. An expert panel with 9 KOL; haematologists was convened consisting of experts from the largest Haematology Units of Greece, covering geographically six out of seven Regional Health Authorities. Unit costs in 2014 prices were taken from official publications. The societal perspective was adopted. RESULTS: Prevalence and incidence rates of MF in Greece are approx. 2.5: 100,000 and 0.7: 100,000 people respectively, corresponding to approx. 270 patients (71.7% with primary and 28.3% with secondary) and 76 new cases every year; 92% of the patients present forms of MF patients and 6% of MF patients are classified as MF patients. Current treatment options in Greece are ruxolitinib and best supportive care (BSC). 72.6% of the primary and 65% of the secondary MF patients treated with ruxolitinib show improvement of spleenomegaly vs. 23% and 7%, respectively for patients treated with BSC. Ruxolitinib patients show Qol improvement and less splenomegaly compared with BSC patients. 23 days per year (51 days for BSC), and 20% of them present with splenomegaly at diagnosis, 1/3 of which reduce their daily activities.

The annual direct cost of managing all MF patients in Greece is estimated at €1,65 million, including pharmaceutical, hospital, follow-up costs, blood transfusions, and management of infections. Production losses are estimated to be €217,975 per year, resulting in a total annual burden of approx. €8.87 million. CONCLUSIONS: MF is associated with significant burden to patients, their families, and to the society. Treatment with ruxolitinib appears to improve patients’ Qol and reduce indirect costs, mainly through reduction of spleenomegaly and splenomegaly.